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Applicant	::	Ian A. Maxwell	
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Commissioner for Patents

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**Amendments**

Sir:

In response to the Office action of March 23, 2006, please find the following amendments, remarks and arguments:

**Amendments to Claims** in the listing of claims begins on page 2.

**Remarks/Arguments** begin on page 5.

**Amendments to the Claims:**

This listing of claims replaces all prior versions, and listings, of the claims in the applications.

**Listing of Claims**

Claim 25 (Currently Amended): An integrated optical waveguide comprising:

a substrate;

a light transmissive element comprising a waveguide and a lens as a unitary body;

an upper cladding patterned to have at least one region in which the light transmissive element is air clad ; and

wherein said lens has a face perpendicular to the substrate and focuses and collimates light in a plane parallel to the substrate and a lens face width at least 50% larger than the waveguide.

Claim 35 (Previously presented): An integrated optical waveguide according to claim 25, wherein the upper cladding is chosen from a group comprising an organosilicon condensate polymer.

Claim 43 (Previously presented): An integrated optical waveguide according to claim 25, wherein the substrate comprises silicon, quartz, fused silica, glass, or a polymeric material.

Claim 44 (Previously presented): An integrated optical waveguide according to claim 43, wherein the polymeric material comprises an acrylate, Perspex, polymethylmethacrylate, polycarbonate, polyester, polyethyleneterephthalate or PET.

Claim 45 (Previously presented): An integrated optical waveguide according to claim 25 wherein the light transmissive element comprises materials selected from polymeric materials, glass and semiconductors.

Claim 66 (Previously presented): An integrated optical waveguide according to claim 25 including a lower cladding layer between the substrate and the light transmissive element.

Claim 67 (Previously presented): An integrated optical waveguide according to claim 66 wherein the lower cladding layer comprises materials selected from polymeric materials, glass and semiconductors.

Claim 68 (Currently amended): An integrated optical waveguide comprising:

a substrate;

~~one or more cladding layers comprising at least one cladding layer patterned to have at least one region with the cladding material absent; and~~

one or more light transmissive elements each comprising a waveguide and a lens as a unitary body; and

one or more cladding layers comprising at least one cladding layer patterned to have at least one region with the cladding material removed from at least one region of the one or more light transmissive elements; wherein said the lens has a face perpendicular to the substrate and a lens face width at least 50% larger than the waveguide and focuses and collimates light in a plane parallel to the substrate.

Claim 69 (Previously presented) The integrated optical waveguide of claim 68 wherein at least one of said one or more cladding layers is composed of an organosilicon condensate polymer.

Claim 70 (Previously presented) The integrated optical waveguide of claim 68 wherein said one or more light transmissive elements and at least one of said one or more cladding layers are composed of materials chosen from a group comprising organosilicon condensate polymers, polymers, quartz, glass and semiconductors.

Claim 71 (Previously presented) The integrated optical waveguide of claim 68 wherein said substrate is composed of materials chosen from a group comprising silicon, quartz, fused silica, glass, or a polymeric material.

Claims 1 - 24, 29-32, 49-65, previously withdrawn.

Claims 26-28, 33-34, 36-42, 46-48, previously cancelled.